WHAT IS CLAIMED IS:

1. A method of producing a diL-lysine monosulfate trihydrate crystal comprising

a) mixing a lysine-based solution with sulfuric acid at a temperature of between approximately -10°C and approximately 35°C, and allowing said crystal to form,

b) recovering said crystal.

2. The method of claim 1, wherein said temperature is between approximately 0°C and approximately 20°C .

3. The method of claim 2, wherein said temperature is approximately 10°C.

4. The method of claim 1, wherein said crystal is recovered by filtration.

5. The method of claim 4, wherein said filtration is selected from the group consisting of suction filtration, centrifugal filtration, centrifugal separation, and press filtration.

6. The method of claim 1, wherein said hydrated diL-lysine sulfate crystal is characterized by having peaks at diffraction angles 2θ of 16.6° and 17.0° in powder X-ray diffraction.

7. A method of producing diL-lysine sulfate comprising

a) mixing a lysine-based solution with sulfuric acid at a temperature of between approximately -10°C and approximately 35°C, and allowing a crystal to form,

b) recovering said crystal,

c) drying said crystal to remove the crystal water.

d) collecting said diL-lysine sulfate.

8. The method of claim 7, wherein said temperature is between approximately 0°C and approximately 20°C .

9. The method of claim 8, wherein said temperature is approximately 10°C.

10. The method of claim 7, wherein said crystal is recovered by filtration.

11. The method of claim 10, wherein said filtration is selected from the group consisting of suction filtration, centrifugal filtration, centrifugal separation, and press filtration.

12. A method of producing a diL-lysine monosulfate trihydrate crystal comprising

a) mixing a lysine-based solution with sulfuric acid at a temperature above approximately 40°C, and allowing crystals to form,

b) lowering the temperature until it is between approximately -10°C and approximately 35°C, and allowing crystals to form,

c) recovering said diL-lysine monosulfate trihydrate crystal.

13. The method of claim 12, wherein said temperature in step (b) is between approximately 0°C and approximately 20°C .

14. The method of claim 13, wherein said temperature in step (b) is approximately 10°C.

15. The method of claim 12, wherein said crystal is recovered by filtration.

16. The method of claim 15, wherein said filtration is selected from the group consisting of suction filtration, centrifugal filtration, centrifugal separation, and press filtration.

17. The method of claim 12, wherein said hydrated diL-lysine sulfate crystal is characterized by having peaks at diffraction angles 2θ of 16.6° and 17.0° in powder X-ray diffraction.

18. A diL-lysine monosulfate trihydrate crystal.

19. The crystal of claim 18, characterized by having peaks at diffraction angles 2θ of 16.6° and 17.0° in powder X-ray diffraction.

20. A diL-lysine monosulfate trihydrate crystal produced by the process:

a) mixing a lysine-based solution with sulfuric acid at a temperature of between approximately -10°C and approximately 35°C, and allowing said crystal to form,

b) recovering said diL-lysine monosulfate trihydrate crystal.

21. The diL-lysine monosulfate trihydrate crystal of claim 20, wherein said temperature is between approximately 0°C and approximately 20°C .

22. The diL-lysine monosulfate trihydrate crystal of claim 21, wherein said temperature is approximately 10°C.

23. The diL-lysine monosulfate trihydrate crystal claim 20, wherein said crystal is recovered by filtration.

24. The diL-lysine monosulfate trihydrate crystal of claim 23, wherein said filtration is selected from the group consisting of suction filtration, centrifugal filtration, centrifugal separation, and press filtration.

25. A composition comprising L-lysine which is prepared by the method of claim 1, followed by a drying step.

26. A composition comprising L-lysine which is prepared by the method of claim 7.

27. A composition comprising L-lysine which is prepared by the method of claim 12, followed by a drying step.